



August 1, 2012

Mr. Mark Nations
The Doe Run Company
P.O. Box 1633
Desloge, Missouri 63601

Re: Ambient Air Monitoring Report – Rivermines Site

Dear Mr. Nations:

Please find attached the May 2012 “*Ambient Air Monitoring Report*” for The Doe Run Company at the Rivermines Sites, located near Park Hills, Missouri.

This report will include the following:

- **Glossary of Terms** – Listing of the abbreviations used for each parameter and unit.
- **Ambient Air Quality Standards** – Lists the maximum allowable concentrations for the measured parameters.
- **TSP, Lead & PM₁₀ Particulate Summaries** – Includes the averages of each monitored parameter, which relates to the federal standards.
- **Particulate and Lead Analysis Spreadsheets.**
- **Lab Results (lead & cadmium)** – Lab reports from Inovatia Laboratories, LLC.
- **Meteorological Data Printouts** – This supplies printouts of each parameter.

Barr Engineering Company offers this report as an independent laboratory. This includes the weighing of filters, obtaining lead and cadmium analysis, compiling the data, and preparing the report. No interpretation of the data or analysis of the results is implied or intended. Should you have any questions regarding this report, please call.

Respectfully,

A handwritten signature in black ink that reads "Richard J. Campbell".

Richard J. Campbell, PE
Chemical Engineer
Senior Environmental Consultant

c: Kathy Rangen
Jason Gunter
Ty Morris

07WE 4.2
A standard 1D barcode with vertical black bars of varying widths on a white background.
DU 00 40391931

Ambient Air Monitoring Report

***Rivermines
Park Hills, Missouri***

***Prepared for
The Doe Run Company***

May 2012



Ambient Air Monitoring Report

***Rivermines
Park Hills, Missouri***

***Prepared for
The Doe Run Company***

May 2012



***1001 Diamond Ridge Suite 1100
Jefferson City, MO 65109
Phone: (573) 638-5000
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GLOSSARY OF TERMS

$\mu\text{g}/\text{m}^3$	Micrograms per Cubic Meter
mph	Miles per Hour
Wind Direction	Degrees from True North
TSP	Total Suspended Particulate
PM ₁₀	Particulate Matter - 10 Microns or Less
mmHg	Millimeters of Mercury

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

PM ₁₀ – Particulate Matter	24-Hour*	Annual Maximum	150 $\mu\text{g}/\text{m}^3$
Lead	Calendar Quarter	Arithmetic Mean	1.5 $\mu\text{g}/\text{m}^3$
Lead	Rolling 3-Month Average	Arithmetic Mean	0.15 $\mu\text{g}/\text{m}^3$

TSP (Total Suspended Particulate) – There are no Federal Standards that apply solely for TSP.

*This standard must be exceeded more than once a year to constitute a violation.



TSP and Lead Concentration Summary

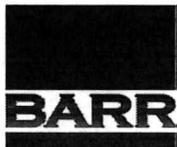
Rivermines
Park Hills, Missouri

2012

Date	TSP Big River #4 ($\mu\text{g}/\text{m}^3$)	TSP South #1 ($\mu\text{g}/\text{m}^3$)	TSP North #2 ($\mu\text{g}/\text{m}^3$)	TSP East #3 ($\mu\text{g}/\text{m}^3$)	LEAD Big River #4 ($\mu\text{g}/\text{m}^3$)	LEAD South #1 ($\mu\text{g}/\text{m}^3$)	LEAD North #2 ($\mu\text{g}/\text{m}^3$)	LEAD East #3 ($\mu\text{g}/\text{m}^3$)
5/1/12	34	35	32	37	0.000	0.000	0.053	0.029
5/2/12	31	30	30	44	0.011	0.007	0.052	0.076
5/3/12	24	21	19	38	0.009	0.000	0.021	0.073
5/4/12	32	38	27	38	0.020	0.026	0.018	0.049
5/7/12	21	22	16	17	0.011	0.021	0.000	0.000
5/8/12	42	44	15	21	0.044	0.120	0.000	0.016
5/9/12	35	64	15	20	0.040	0.231	0.012	0.027
5/10/12	39	38	21	27	0.019	0.144	0.000	0.029
5/11/12	30	30	27	26	0.017	0.024	0.010	0.016
5/14/12	43	117	34	41	0.036	0.665	0.040	0.050
5/15/12	45	65	34	41	0.036	0.102	0.025	0.071
5/16/12	57	171	83	49	0.024	0.743	0.024	0.039
5/17/12	47	44	38	37	0.027	0.076	0.010	0.016
5/18/12	42	49	34	39	0.020	0.034	0.019	0.030
5/21/12	25	74	21	23	0.007	0.322	0.000	0.014
5/22/12	39	48	27	28	0.035	0.129	0.009	0.015
5/23/12	31	30	30	31	0.006	0.007	0.032	0.000
5/24/12	95	95	99	105	0.044	0.020	0.303	0.034
5/25/12	54	48	46	48	0.022	0.010	0.028	0.014
5/29/12	51	60	21	24	0.060	0.171	0.012	0.011
5/30/12	32	35	25	21	0.021	0.069	0.019	0.024
5/31/12	27	35	14	15	0.021	0.040	0.000	0.000
Monthly Average	40	54	32	35	0.024	0.135	0.031	0.029
Apr 2012					0.016	0.083	0.009	0.016
Mar 2012					0.016	0.021	0.039	0.017
Rolling 3-month Average					0.02	0.08	0.03	0.02
					3-month Average Lead NAAQS $\mu\text{g}/\text{m}^3$		0.15	

Please see the particulate analysis sheets for explanations of missing or invalid data.

Note: A summary of the Big River #4 sampler data is also included, because it was part of the QA plan.



Particulate Summary

Rivermines
Park Hills, Missouri

2012

Date	PM ₁₀ Big River #4 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ South #1 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ North #2 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ East #3 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ NAAQS ($\mu\text{g}/\text{m}^3$)
3-May	10	9	8	14	150
6-May	21	22	19	20	150
9-May	16	24	9	11	150
12-May	19	18	17	18	150
15-May	20	28	16	19	150
18-May	24	23	23	21	150
21-May	18	30	15	16	150
24-May	39	34	31	31	150
27-May	19	20	20	19	150
30-May	15	30	12	11	150
Monthly Average	20	24	17	18	

Please see the particulate analysis sheets for explanations of missing or invalid data.

Note: A summary of the Big River #4 sampler data is also included, because it was part of the QA plan.

Particulate and Lead Analysis



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P4557

Big River Site #4- Primary

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _i mmHg	Ratio P _i /P _a	Q _a m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³ Lead µg/m ³	
5/1/2012	8593226	0.0591	< 10	24	741.5	36.0	0.951	1.243	1.218	23.65	1728	34	0.000
5/2/2012	8593217	0.0522	19	26	742.2	36.4	0.951	1.248	1.213	23.54	1713	31	0.011
5/3/2012	8593208	0.0413	16	24	743.4	36.0	0.952	1.243	1.222	23.71	1738	24	0.009
5/4/2012	8590796	0.0559	35	24	742.3	36.0	0.951	1.244	1.219	23.54	1721	32	0.020
5/7/2012	8590786	0.0359	19	20	741.7	35.6	0.952	1.238	1.228	23.70	1746	21	0.011
5/8/2012	8590777	0.0741	77	17	743.6	35.2	0.953	1.234	1.238	23.70	1760	42	0.044
5/9/2012	8590768	0.0601	70	15	743.8	35.0	0.953	1.230	1.244	23.29	1738	35	0.040
5/10/2012	8590758	0.0679	33	15	744.0	35.0	0.953	1.230	1.244	23.56	1759	39	0.019
5/11/2012	8590749	0.0539	30	17	746.9	35.2	0.953	1.233	1.245	23.64	1786	30	0.017
5/14/2012	8590740	0.0759	62	17	746.1	35.2	0.953	1.233	1.244	23.47	1751	43	0.036
5/15/2012	8590731	0.0784	63	19	745.1	35.4	0.953	1.236	1.237	23.69	1759	45	0.036
5/16/2012	8590721	0.1008	41	19	744.5	35.4	0.952	1.236	1.236	23.68	1756	57	0.024
5/17/2012	8590711	0.0819	48	17	745.3	35.2	0.953	1.233	1.242	23.60	1759	47	0.027
5/18/2012	8540397	0.0729	35	20	743.8	35.6	0.952	1.239	1.231	23.73	1752	42	0.020
5/21/2012	8540391	0.0448	12	18	747.0	35.3	0.953	1.235	1.243	23.70	1767	25	0.007
5/22/2012	8540381	0.0679	61	16	744.5	35.1	0.953	1.232	1.242	23.58	1757	39	0.035
5/23/2012	8540372	0.0541	10	20	740.0	35.6	0.952	1.238	1.225	23.67	1740	31	0.006
5/24/2012	8540362	0.1641	76	25	737.3	36.2	0.951	1.246	1.207	23.73	1719	95	0.044
5/25/2012	8540350	0.0920	38	27	742.5	36.4	0.951	1.249	1.213	23.58	1716	54	0.022
5/29/2012	8540344	0.0887	104	24	741.4	36.1	0.951	1.245	1.216	23.66	1727	51	0.060
5/30/2012	8540334	0.0557	37	21	742.1	35.7	0.952	1.239	1.226	23.68	1742	32	0.021
5/31/2012	8540323	0.0471	37	18	739.4	35.3	0.952	1.234	1.229	23.60	1740	27	0.021

Data Captured	TSP	Lead
Valid Samples:	22	22
Scheduled Samples:	22	22
Percent Data Captured:	100%	100%

Monthly Average:	40	0.024
Standard Deviation:	16	0.015
Maximum:	95	0.060
Minimum:	21	0.000

NOTES

5/28/2012 - Holiday - No sample scheduled

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius
 P_{av} = average station pressure in millimeters of mercury
 P_i = (((Temp in °Kelvin * Temp Slope)+Temp Int.))*1.868
 P_i = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868
 P_i/P_a = pressure ratio of P_i and P_{av} = 1 - P_i/P_{av}
 Q_a = look up table volumetric flow rate
 Q_{std} = total sample volumetric flow rate corrected to standard conditions
 V_{std} = total sample volume corrected to standard conditions
 TSP = mass concentration in µg/std m³
 Lead = mass concentration in µg/std m³



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P2940

Elvins Rivermines Site #1 by Office

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _i mmHg	Ratio P _i /P _{av}	Q _a m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³	Lead µg/m ³
5/1/2012	8593223	0.0609	< 10	24	741.5	36.0	0.951	1.249	1.224	23.82	1749	35	0.000
5/2/2012	8593214	0.0526	12	26	742.2	36.4	0.951	1.254	1.218	23.92	1748	30	0.007
5/3/2012	8593205	0.0364	< 10	24	743.4	36.0	0.952	1.249	1.227	23.87	1758	21	0.000
5/4/2012	8590793	0.0667	45	24	742.3	36.0	0.951	1.250	1.225	23.98	1762	38	0.026
5/7/2012	8590783	0.0380	37	20	741.7	35.6	0.952	1.243	1.233	23.87	1766	22	0.021
5/8/2012	8590774	0.0774	212	17	743.6	35.2	0.953	1.239	1.243	23.67	1766	44	0.120
5/9/2012	8590765	0.1140	414	15	743.8	35.0	0.953	1.236	1.250	23.87	1790	64	0.231
5/10/2012	8590755	0.0677	258	15	744.0	35.0	0.953	1.236	1.250	23.92	1794	38	0.144
5/11/2012	8590746	0.0538	42	17	746.9	35.2	0.953	1.239	1.251	23.77	1784	30	0.024
5/14/2012	8590737	0.2056	1168	17	746.1	35.2	0.953	1.239	1.249	23.43	1757	117	0.665
5/15/2012	8590728	0.1159	182	19	745.1	35.4	0.953	1.241	1.243	23.82	1776	65	0.102
5/16/2012	8590718	0.3037	1321	19	744.5	35.4	0.952	1.242	1.241	23.87	1778	171	0.743
5/17/2012	8590708	0.0787	136	17	745.3	35.2	0.953	1.239	1.248	23.81	1783	44	0.076
5/18/2012	8590702	0.0861	61	20	743.8	35.6	0.952	1.244	1.236	23.93	1775	49	0.034
5/21/2012	8540388	0.1311	572	18	747.0	35.3	0.953	1.240	1.248	23.76	1780	74	0.322
5/22/2012	8540378	0.0849	228	16	744.5	35.1	0.953	1.238	1.248	23.64	1770	48	0.129
5/23/2012	8540369	0.0520	12	20	740.0	35.6	0.952	1.243	1.230	23.86	1761	30	0.007
5/24/2012	8540359	0.1646	34	25	737.3	36.2	0.951	1.252	1.213	23.88	1737	95	0.020
5/25/2012	8540353	0.0816	16	27	742.5	36.4	0.951	1.254	1.218	23.28	1702	48	0.010
5/29/2012	8540341	0.1023	293	24	741.4	36.1	0.951	1.250	1.222	23.41	1717	60	0.171
5/30/2012	8540331	0.0612	122	21	742.1	35.7	0.952	1.245	1.232	23.75	1755	35	0.069
5/31/2012	8540320	0.0611	71	18	739.4	35.3	0.952	1.240	1.235	23.75	1759	35	0.040

Data Captured	TSP	Lead
Valid Samples:	22	22
Scheduled Samples:	22	22
Percent Data Captured:	100%	100%

Monthly Average:	54	0.135
Standard Deviation:	35	0.202
Maximum:	171	0.743
Minimum:	21	0.000

NOTES

5/28/2012 - Holiday - No sample scheduled

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius
P_{av} = average station pressure in millimeters of mercury
P_i = ((Temp in °Kelvin * Temp Slope) + Temp Int.) * 1.868
P_i = ((Temp in °Kelvin * 0.0664) + (-0.4213)) * 1.868
P_i/P_{av} = pressure ratio of P_i and P_{av} = 1 - P_i/P_{av}
Q_a = look up table volumetric flow rate
Q_{std} = total sample volumetric flow rate corrected to standard conditions
V_{std} = total sample volume corrected to standard conditions
TSP = mass concentration in µg/std m³
Lead = mass concentration in µg/std m³



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P2941

Elvins Rivermines Site #2 Wood & Barton

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _i mmHg	Ratio P _i /P _{av}	Q _a m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³	Lead µg/m ³
5/1/2012	8593225	0.0552	91	24	741.5	36.0	0.951	1.233	1.207	23.74	1720	32	0.053
5/2/2012	8593216	0.0519	89	26	742.2	36.4	0.951	1.237	1.202	23.87	1722	30	0.052
5/3/2012	8593207	0.0336	36	24	743.4	36.0	0.952	1.233	1.211	23.82	1731	19	0.021
5/4/2012	8590795	0.0461	31	24	742.3	36.0	0.951	1.233	1.208	23.86	1729	27	0.018
5/7/2012	8590785	0.0282	< 10	20	741.7	35.6	0.952	1.227	1.216	23.78	1736	16	0.000
5/8/2012	8590776	0.0269	< 10	17	743.6	35.2	0.953	1.222	1.226	23.87	1756	15	0.000
5/9/2012	8590767	0.0258	21	15	743.8	35.0	0.953	1.219	1.233	23.69	1752	15	0.012
5/10/2012	8590757	0.0363	< 10	15	744.0	35.0	0.953	1.219	1.233	23.85	1764	21	0.000
5/11/2012	8590748	0.0469	18	17	746.9	35.2	0.953	1.222	1.234	23.67	1752	27	0.010
5/14/2012	8590739	0.0596	70	17	746.1	35.2	0.953	1.222	1.232	23.59	1744	34	0.040
5/15/2012	8590730	0.0599	44	19	745.1	35.4	0.953	1.224	1.226	23.91	1759	34	0.025
5/16/2012	8590720	0.1458	42	19	744.5	35.4	0.952	1.225	1.224	23.76	1746	83	0.024
5/17/2012	8590710	0.0674	17	17	745.3	35.2	0.953	1.222	1.231	23.81	1758	38	0.010
5/18/2012	8540398	0.0588	34	20	743.8	35.6	0.952	1.227	1.220	23.79	1741	34	0.019
5/21/2012	8540390	0.0367	< 10	18	747.0	35.3	0.953	1.223	1.231	23.81	1759	21	0.000
5/22/2012	8540380	0.0473	16	16	744.5	35.1	0.953	1.221	1.231	23.80	1758	27	0.009
5/23/2012	8540371	0.0516	55	20	740.0	35.6	0.952	1.226	1.214	23.83	1736	30	0.032
5/24/2012	8540361	0.1686	518	25	737.3	36.2	0.951	1.235	1.196	23.83	1711	99	0.303
5/25/2012	8540351	0.0792	47	27	742.5	36.4	0.951	1.238	1.202	23.79	1716	46	0.028
5/29/2012	8540343	0.0365	20	24	741.4	36.1	0.951	1.234	1.206	23.61	1708	21	0.012
5/30/2012	8540333	0.0432	34	21	742.1	35.7	0.952	1.228	1.215	23.79	1735	25	0.019
5/31/2012	8540322	0.0248	< 10	18	739.4	35.3	0.952	1.223	1.218	23.56	1721	14	0.000

Data Captured	TSP	Lead
Valid Samples:	22	22
Scheduled Samples:	22	22
Percent Data Captured:	100%	100%

Monthly Average:	32	0.031
Standard Deviation:	21	0.063
Maximum:	99	0.303
Minimum:	14	0.000

NOTES

5/28/2012 - Holiday - No sample scheduled

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius
 P_{av} = average station pressure in millimeters of mercury
 P_i = (((Temp in °Kelvin * Temp Slope) + Temp Int)) * 1.868
 P_i = ((Temp in °Kelvin * 0.0664) + (-0.4213)) * 1.868
 P_i/P_{av} = pressure ratio of P_i and P_{av} = 1 - P_i/P_{av}
 Q_a = look up table volumetric flow rate
 Q_{std} = total sample volumetric flow rate corrected to standard conditions
 V_{std} = total sample volume corrected to standard conditions
 TSP = mass concentration in µg/std m³
 Lead = mass concentration in µg/std m³



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P4475

Elvins Rivermines Site #3 WTP

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _i mmHg	Ratio P _i /P _{av}	Q _a m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³	Lead µg/m ³
5/1/2012	8593224	0.0640	50	24	741.5	36.0	0.951	1.230	1.205	23.75	1717	37	0.029
5/2/2012	8593215	0.0750	130	26	742.2	36.4	0.951	1.234	1.199	23.71	1706	44	0.076
5/3/2012	8593206	0.0649	125	24	743.4	36.0	0.952	1.230	1.208	23.73	1721	38	0.073
5/4/2012	8590794	0.0644	84	24	742.3	36.0	0.951	1.231	1.206	23.73	1716	38	0.049
5/7/2012	8590784	0.0289	< 10	20	741.7	35.6	0.952	1.225	1.214	23.83	1736	17	0.000
5/8/2012	8590775	0.0357	27	17	743.6	35.2	0.953	1.220	1.224	23.62	1735	21	0.016
5/9/2012	8590766	0.0348	46	15	743.8	35.0	0.953	1.216	1.230	23.62	1743	20	0.027
5/10/2012	8590756	0.0473	51	15	744.0	35.0	0.953	1.216	1.230	23.74	1752	27	0.029
5/11/2012	8590747	0.0461	27	17	746.9	35.2	0.953	1.219	1.232	23.75	1755	26	0.016
5/14/2012	8590738	0.0714	88	17	746.1	35.2	0.953	1.219	1.230	23.70	1749	41	0.050
5/15/2012	8590729	0.0714	123	19	745.1	35.4	0.953	1.222	1.224	23.68	1739	41	0.071
5/16/2012	8590719	0.0857	68	19	744.5	35.4	0.952	1.223	1.222	23.76	1743	49	0.039
5/17/2012	8590709	0.0658	28	17	745.3	35.2	0.953	1.219	1.229	23.82	1756	37	0.016
5/18/2012	8590701	0.0670	52	20	743.8	35.6	0.952	1.225	1.218	23.78	1737	39	0.030
5/21/2012	8540389	0.0400	25	18	747.0	35.3	0.953	1.221	1.229	23.86	1760	23	0.014
5/22/2012	8540379	0.0487	26	16	744.5	35.1	0.953	1.218	1.229	23.76	1751	28	0.015
5/23/2012	8540370	0.0534	< 10	20	740.0	35.6	0.952	1.224	1.212	23.72	1725	31	0.000
5/24/2012	8540360	0.1791	58	25	737.3	36.2	0.951	1.232	1.194	23.78	1703	105	0.034
5/25/2012	8540352	0.0811	24	27	742.5	36.4	0.951	1.235	1.199	23.72	1707	48	0.014
5/29/2012	8540342	0.0417	18	24	741.4	36.1	0.951	1.231	1.203	23.62	1705	24	0.011
5/30/2012	8540332	0.0357	41	21	742.1	35.7	0.952	1.226	1.213	23.69	1725	21	0.024
5/31/2012	8540321	0.0264	< 10	18	739.4	35.3	0.952	1.221	1.216	23.64	1724	15	0.000

Data Captured	TSP	Lead
Valid Samples:	22	22
Scheduled Samples:	22	22
Percent Data Captured:	100%	100%

Monthly Average:	35	0.029
Standard Deviation:	19	0.023
Maximum:	105	0.076
Minimum:	15	0.000

NOTES

5/28/2012 - Holiday - No sample scheduled

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius
 P_{av} = average station pressure in millimeters of mercury
 P_i = (((Temp in °Kelvin * Temp Slope) + Temp Int.)) * 1.868
 P_i = ((Temp in °Kelvin * 0.0664) + (-0.4213)) * 1.868
 P_i/P_{av} = pressure ratio of P_i and P_{av} = 1 - P_i/P_{av}
 Q_a = look up table volumetric flow rate
 Q_{std} = total sample volumetric flow rate corrected to standard conditions
 V_{std} = total sample volume corrected to standard conditions
 TSP = mass concentration in µg/std m³
 Lead = mass concentration in µg/std m³



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P6609

Big River Site #4 - QA

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. µg	T _{av} C	P _{av} mmHg	P _f mmHg	Ratio P _f /P _a	Q _a m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Concentrations TSP µg/m ³	Lead µg/m ³
5/1/2012	8593227	0.0477	< 10	24	741.5	36.0	0.951	1.235	1.210	23.58	1712	28	0.000
5/3/2012	8593209	0.0441	17	24	743.4	36.0	0.952	1.235	1.214	23.85	1737	25	0.010
5/8/2012	8590787	0.0779	76	17	743.6	35.2	0.953	1.225	1.229	23.91	1764	44	0.043
5/10/2012	8590759	0.0672	32	15	744.0	35.0	0.953	1.221	1.235	23.71	1757	38	0.018
5/15/2012	8590741	0.0683	63	19	745.1	35.4	0.953	1.227	1.229	23.46	1730	40	0.036
5/17/2012	8590712	0.0848	47	17	745.3	35.2	0.953	1.224	1.234	23.78	1760	48	0.026
5/22/2012	8540392	0.0692	66	16	744.5	35.1	0.953	1.223	1.234	23.71	1755	39	0.037
5/24/2012	8540363	0.1689	87	25	737.3	36.2	0.951	1.237	1.199	23.48	1689	100	0.052
5/29/2012	8540345	0.0921	108	24	741.4	36.1	0.951	1.236	1.208	23.59	1710	54	0.063
5/31/2012	8540324	0.0498	41	18	739.4	35.3	0.952	1.226	1.221	23.57	1726	29	0.024

Valid Samples:	10	10
Scheduled Samples:	10	10
Percent Data Captured:	100%	100%

Monthly Average:	45	0.031
Standard Deviation:	22	0.019
Maximum:	100	0.063
Minimum:	25	0.000

NOTES

5/28/2012 - Holiday - No sample scheduled

DEFINITIONS and CALCULATIONS

- T_{av} = average temperature in degrees Celcius
- P_{av} = average station pressure in millimeters of mercury
- P_f = (((Temp in °Kelvin * Temp Slope))+Temp Int.)*1.868
- P_f = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868
- P_f/P_a = pressure ratio of P_f and P_{av} = 1 - P_f/P_{av}
- Q_a = look up table volumetric flow rate
- Q_{std} = total sample volumetric flow rate corrected to standard conditions
- V_{std} = total sample volume corrected to standard conditions
- TSP = mass concentration in µg/std m³
- Lead = mass concentration in µg/std m³

Lab Results (Lead and Cadmium)



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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0476
Date Received: 05/17/12
Analysis Method: 40 CFR §50
Appendix G

Location

**Elvins River
Mines**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122490	8593223	05/01/12	#1 South - Office	< 10	< 10	05/23/12 - DS
122491	8593225	05/01/12	#2 North - W&B	91	< 10	05/23/12 - DS
122492	8593224	05/01/12	#3 East - WTP	50	< 10	05/23/12 - DS
122493	8593214	05/02/12	#1 South - Office	12	< 10	05/23/12 - DS
122494	8593216	05/02/12	#2 North - W&B	89	< 10	05/22/12 - DS
122495	8593215	05/02/12	#3 East - WTP	130	< 10	05/22/12 - DS
122496	8593205	05/03/12	#1 South - Office	< 10	< 10	05/22/12 - DS
122497	8593207	05/03/12	#2 North - W&B	36	< 10	05/22/12 - DS
122498	8593206	05/03/12	#3 East - WTP	125	< 10	05/22/12 - DS
122499	8590793	05/04/12	#1 South - Office	45	< 10	05/22/12 - DS
122500	8590795	05/04/12	#2 North - W&B	31	< 10	05/22/12 - DS
122501	8590794	05/04/12	#3 East - WTP	84	< 10	05/22/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
 7390 Ohms Lane
 Edina, MN 55439-2330

Chain of Custody No.: 12-0493

Date Received: 05/23/12

Analysis Method: 40 CFR §50
 Appendix G

Location

**Elvins River
 Mines**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122552	8590783	05/07/12	#1 South - Office	37	< 10	05/30/12 - DS
122553	8590785	05/07/12	#2 North - W&B	< 10	< 10	05/30/12 - DS
122554	8590784	05/07/12	#3 East - WTP	< 10	< 10	05/30/12 - DS
122555	8590774	05/08/12	#1 South - Office	212	< 10	05/30/12 - DS
122556	8590776	05/08/12	#2 North - W&B	< 10	< 10	05/30/12 - DS
122557	8590775	05/08/12	#3 East - WTP	27	< 10	05/30/12 - DS
122558	8590765	05/09/12	#1 South - Office	414	< 10	05/30/12 - DS
122559	8590767	05/09/12	#2 North - W&B	21	< 10	05/30/12 - DS
122560	8590766	05/09/12	#3 East - WTP	46	< 10	05/30/12 - DS
122561	8590755	05/10/12	#1 South - Office	258	< 10	05/30/12 - DS
122562	8590757	05/10/12	#2 North - W&B	< 10	< 10	05/30/12 - DS
122563	8590756	05/10/12	#3 East - WTP	51	< 10	05/30/12 - DS
122564	8590746	05/11/12	#1 South - Office	42	< 10	05/30/12 - DS
122565	8590748	05/11/12	#2 North - W&B	18	< 10	05/30/12 - DS
122566	8590747	05/11/12	#3 East - WTP	27	< 10	05/30/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
 7390 Ohms Lane
 Edina, MN 55439-2330

Chain of Custody No.: 12-0516
Date Received: 06/01/12
Analysis Method: 40 CFR §50
 Appendix G

Location Elvins River
 Mines

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122711	8590737	05/14/12	#1 South - Office	1168	13	06/15/12 - DS
122712	8590739	05/14/12	#2 North - W&B	70	< 10	06/15/12 - DS
122713	8590738	05/14/12	#3 East - WTP	88	< 10	06/15/12 - DS
122714	8590728	05/15/12	#1 South - Office	182	< 10	06/15/12 - DS
122715	8590730	05/15/12	#2 North - W&B	44	< 10	06/15/12 - DS
122716	8590729	05/15/12	#3 East - WTP	123	< 10	06/15/12 - DS
122717	8590718	05/16/12	#1 South - Office	1321	12	06/15/12 - DS
122718	8590720	05/16/12	#2 North - W&B	42	< 10	06/15/12 - DS
122719	8590719	05/16/12	#3 East - WTP	68	< 10	06/15/12 - DS
122720	8590708	05/17/12	#1 South - Office	136	< 10	06/15/12 - DS
122721	8590710	05/17/12	#2 North - W&B	17	< 10	06/15/12 - DS
122722	8590709	05/17/12	#3 East - WTP	28	< 10	06/15/12 - DS
122723	8590702	05/18/12	#1 South - Office	61	< 10	06/15/12 - DS
122724	8540398	05/18/12	#2 North - W&B	34	< 10	06/15/12 - DS
122725	8590701	05/18/12	#3 East - WTP	52	< 10	06/15/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
 7390 Ohms Lane
 Edina, MN 55439-2330

Chain of Custody No.: 12-0562

Date Received: 06/15/12

Analysis Method: 40 CFR §50
 Appendix G

Location

**Elvins River
 Mines**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122883	8540388	05/21/12	#1 South - Office	572	< 10	06/22/12 - DS
122884	8540390	05/21/12	#2 North - W&B	< 10	< 10	06/22/12 - DS
122885	8540389	05/21/12	#3 East - WTP	25	< 10	06/22/12 - DS
122886	8540378	05/22/12	#1 South - Office	228	< 10	06/22/12 - DS
122887	8540380	05/22/12	#2 North - W&B	16	< 10	06/22/12 - DS
122888	8540379	05/22/12	#3 East - WTP	26	< 10	06/22/12 - DS
122889	8540369	05/23/12	#1 South - Office	12	< 10	06/22/12 - DS
122890	8540371	05/23/12	#2 North - W&B	55	< 10	06/22/12 - DS
122891	8540370	05/23/12	#3 East - WTP	< 10	< 10	06/22/12 - DS
122892	8540359	05/24/12	#1 South - Office	34	< 10	06/22/12 - DS
122893	8540361	05/24/12	#2 North - W&B	518	< 10	06/22/12 - DS
122894	8540360	05/24/12	#3 East - WTP	58	< 10	06/22/12 - DS
122895	8540353	05/25/12	#1 South - Office	16	< 10	06/22/12 - DS
122896	8540351	05/25/12	#2 North - W&B	47	< 10	06/22/12 - DS
122897	8540352	05/25/12	#3 East - WTP	24	< 10	06/22/12 - DS
122898	8540341	05/29/12	#1 South - Office	293	< 10	06/22/12 - DS
122899	8540343	05/29/12	#2 North - W&B	20	< 10	06/22/12 - DS
122900	8540342	05/29/12	#3 East - WTP	18	< 10	06/22/12 - DS
122901	8540331	05/30/12	#1 South - Office	122	< 10	06/22/12 - DS
122902	8540333	05/30/12	#2 North - W&B	34	< 10	06/22/12 - DS
122903	8540332	05/30/12	#3 East - WTP	41	< 10	06/22/12 - DS
122904	8540320	05/31/12	#1 South - Office	71	< 10	06/22/12 - DS
122905	8540322	05/31/12	#2 North - W&B	< 10	< 10	06/22/12 - DS
122906	8540321	05/31/12	#3 East - WTP	< 10	< 10	06/22/12 - DS

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ANALYSIS REPORT

Client Information:
Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0476
Date Received: 05/17/12
Analysis Method: 40 CFR §50
Appendix G
Location **Big River**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122484	8593226	05/01/12	#4 Primary	< 10	< 10	05/23/12 - DS
122485	8593227	05/01/12	#4 QA	< 10	< 10	05/23/12 - DS
122486	8593217	05/02/12	#4 Primary	19	< 10	05/23/12 - DS
122487	8593208	05/03/12	#4 Primary	16	< 10	05/23/12 - DS
122488	8593209	05/03/12	#4 QA	17	< 10	05/23/12 - DS
122489	8590796	05/04/12	#4 Primary	35	< 10	05/23/12 - DS

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ANALYSIS REPORT

Client Information:
Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0493
Date Received: 05/23/12
Analysis Method: 40 CFR §50
Appendix G

Location **Big River**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122545	8590786	05/07/12	#4 Primary	19	< 10	05/30/12 - DS
122546	8590777	05/08/12	#4 Primary	77	< 10	05/30/12 - DS
122547	8590787	05/08/12	#4 QA	76	< 10	05/30/12 - DS
122548	8590768	05/09/12	#4 Primary	70	< 10	05/30/12 - DS
122549	8590758	05/10/12	#4 Primary	33	< 10	05/30/12 - DS
122550	8590759	05/10/12	#4 QA	32	< 10	05/30/12 - DS
122551	8590749	05/11/12	#4 Primary	30	< 10	05/30/12 - DS

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ANALYSIS REPORT

Client Information:
 Barr Engineering Company
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Chain of Custody No.: 12-0516
Date Received: 06/01/12
Analysis Method: 40 CFR §50
 Appendix G
Location: Big River

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122704	8590740	05/14/12	#4 Primary	62	< 10	06/15/12 - DS
122705	8590731	05/15/12	#4 Primary	63	< 10	06/15/12 - DS
122706	8590741	05/15/12	#4 QA	63	< 10	06/15/12 - DS
122707	8590721	05/16/12	#4 Primary	41	< 10	06/15/12 - DS
122708	8590711	05/17/12	#4 Primary	48	< 10	06/15/12 - DS
122709	8590712	05/17/12	#4 QA	47	< 10	06/15/12 - DS
122710	8540397	05/18/12	#4 Primary	35	< 10	06/15/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
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Chain of Custody No.: 12-0562
Date Received: 06/15/12
Analysis Method: 40 CFR §50
 Appendix G

Location **Big River**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
122871	8540391	05/21/12	#4 Primary	12	< 10	06/22/12 - DS
122872	8540381	05/22/12	#4 Primary	61	< 10	06/22/12 - DS
122873	8540392	05/22/12	#4 QA	66	< 10	06/22/12 - DS
122874	8540372	05/23/12	#4 Primary	10	< 10	06/22/12 - DS
122875	8540362	05/24/12	#4 Primary	76	< 10	06/22/12 - DS
122876	8540363	05/24/12	#4 QA	87	< 10	06/22/12 - DS
122877	8540350	05/25/12	#4 Primary	38	< 10	06/22/12 - DS
122878	8540344	05/29/12	#4 Primary	104	< 10	06/22/12 - DS
122879	8540345	05/29/12	#4 QA	108	< 10	06/22/12 - DS
122880	8540334	05/30/12	#4 Primary	37	< 10	06/22/12 - DS
122881	8540323	05/31/12	#4 Primary	37	< 10	06/22/12 - DS
122882	8540324	05/31/12	#4 QA	41	< 10	06/22/12 - DS

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6/25/12

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Meteorological Data

Meteorological Report

The Doe Run Company

Wind Speed

Average Interval: 01 Hour

Units: mph

Sampling Frequency: 01 Second

Site Name: Rivermines

2012 Day	Hour																								24 Hour Avg		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Avg	
1-May	0.2	2.3	1.1	1.2	3.2	5.3	7.6	7.1	9.6	10.1	8.5	11.5	10.4	9.9	8.9	8.4	8.0	5.9	5.3	4.5	5.6	6.4	7.9	7.3	11.5	6.5	
2-May	7.9	8.5	7.2	7.4	7.6	7.4	7.5	10.1	10.5	10.7	10.4	10.0	9.0	8.7	8.3	7.6	8.1	7.5	4.8	3.3	4.1	5.3	7.2	6.1	10.7	7.7	
3-May	7.0	5.5	5.6	6.8	6.3	4.2	5.2	6.2	7.0	6.1	6.0	5.0	6.6	8.5	8.8	9.1	8.6	8.6	5.0	4.9	4.5	2.5	2.2	3.0	9.1	6.0	
4-May	2.0	2.9	1.0	1.9	2.3	2.9	2.5	4.8	3.7	3.8	3.0	4.8	8.3	9.0	6.5	5.5	3.5	2.8	2.6	1.5	0.4	0.7	0.0	0.6	9.0	3.2	
5-May	0.1	0.2	0.5	1.0	1.1	1.6	1.3	0.7	2.0	2.1	2.7	3.1	4.8	4.9	5.1	4.4	3.1	1.7	2.3	2.9	2.8	3.5	1.6	0.0	5.1	2.2	
6-May	0.8	0.3	1.2	0.6	0.6	0.3	0.3	1.5	6.4	9.2	9.3	8.2	7.5	7.5	6.0	6.2	5.5	4.0	2.5	1.3	1.1	0.0	1.6	7.9	9.3	3.7	
7-May	6.6	6.8	4.6	1.9	3.0	3.6	1.7	0.9	1.9	2.1	2.0	5.0	4.0	4.3	4.1	5.4	8.6	8.2	6.5	5.1	4.0	2.6	1.4	0.2	8.6	3.9	
8-May	2.4	3.4	0.9	0.5	0.6	1.4	3.9	4.6	4.9	4.9	6.3	5.2	5.5	4.1	1.4	1.9	1.6	0.5	0.6	0.1	0.1	0.2	0.8	0.9	6.3	2.4	
9-May	1.2	0.8	1.1	1.2	0.7	0.8	0.9	2.8	4.7	6.0	6.4	6.8	6.6	7.9	8.1	7.3	7.5	6.0	3.4	0.2	0.5	0.9	0.2	1.3	8.1	3.5	
10-May	0.6	0.6	1.1	1.4	1.5	1.4	1.1	1.1	1.4	2.7	4.4	2.5	2.3	2.1	3.2	3.6	1.8	0.6	1.1	0.4	0.1	0.1	0.0	0.2	4.4	1.5	
11-May	0.2	0.1	0.3	0.1	0.2	0.0	0.3	4.3	5.1	4.9	4.5	4.4	4.1	3.3	3.6	3.4	2.6	2.0	2.1	1.2	0.2	0.0	0.0	0.0	5.1	1.9	
12-May	0.3	0.1	0.3	0.1	0.1	0.3	0.4	0.1	0.8	1.6	1.6	3.2	2.6	3.4	4.6	4.8	4.1	4.1	1.5	0.0	0.1	0.2	0.1	0.3	4.8	1.4	
13-May	0.2	0.3	0.1	0.1	0.2	0.0	0.4	2.3	3.1	5.8	7.4	6.6	6.7	6.0	6.9	7.5	6.6	6.8	5.2	3.7	3.0	0.5	0.2	0.1	7.5	3.3	
14-May	0.1	0.2	0.5	0.2	0.2	0.1	0.3	2.6	5.7	6.9	6.8	6.1	5.8	5.0	4.1	4.6	3.9	4.3	1.5	0.4	0.3	0.1	0.8	1.2	6.9	2.6	
15-May	2.2	2.2	2.2	2.2	2.0	2.0	0.9	0.8	1.4	1.9	2.5	2.9	2.1	3.0	2.7	2.8	2.7	1.1	0.4	0.7	0.7	1.3	1.0	1.5	3.0	1.8	
16-May	1.1	1.1	1.0	0.3	1.2	0.6	0.4	1.3	2.0	3.7	6.2	6.6	7.0	6.8	6.5	6.8	7.1	6.4	4.4	1.0	0.4	0.2	0.1	0.3	7.1	3.0	
17-May	0.4	0.4	0.2	0.1	0.1	0.2	0.4	1.5	2.1	2.4	3.3	3.9	4.2	4.1	4.1	3.4	3.3	1.4	0.2	0.6	0.2	0.4	0.4	4.2	1.7		
18-May	0.1	0.1	0.1	0.0	0.0	0.2	0.3	0.8	3.3	3.0	2.5	4.3	4.6	3.9	4.5	5.5	4.9	3.7	0.7	0.2	0.3	0.0	0.0	0.3	5.5	1.8	
19-May	0.3	0.3	0.4	0.2	0.2	0.1	0.5	0.4	4.8	6.8	7.4	6.4	5.6	5.6	6.5	6.3	6.0	5.1	4.0	2.5	3.5	3.8	2.8	0.7	7.4	3.3	
20-May	0.2	1.1	0.3	0.4	0.2	0.2	2.8	4.4	3.6	4.3	5.7	7.2	5.5	3.4	2.5	3.8	2.5	3.9	1.7	0.6	2.6	1.9	1.3	0.6	7.2	2.5	
21-May	0.2	0.7	2.7	4.3	4.7	4.4	4.7	6.5	6.6	7.7	6.8	7.4	7.1	7.4	7.6	7.7	8.1	7.1	5.2	0.7	0.2	0.2	0.2	0.3	8.1	4.5	
22-May	0.4	1.1	1.3	2.0	2.0	1.8	1.3	1.3	2.5	3.2	4.7	4.7	4.1	3.8	3.2	3.2	1.6	1.7	0.6	0.1	0.1	0.3	0.4	0.1	4.7	1.9	
23-May	0.1	0.0	0.5	0.1	0.5	0.1	0.4	2.3	4.5	5.8	6.7	5.7	6.0	5.6	6.1	6.2	6.2	6.5	4.4	1.6	2.9	4.3	5.1	4.7	6.7	3.6	
24-May	5.2	4.7	5.7	6.8	5.6	4.9	6.5	7.4	8.1	9.0	12.2	13.8	12.7	13.0	11.8	11.4	8.8	7.7	7.6	5.0	5.0	5.7	5.6	4.6	13.8	7.9	
25-May	2.7	2.5	2.1	3.0	0.5	0.2	1.2	2.9	3.1	2.6	2.4	3.0	3.0	4.9	7.3	7.4	8.4	6.3	3.2	2.4	2.7	2.9	3.2	1.8	8.4	3.3	
26-May	0.5	0.5	2.6	2.4	1.7	0.5	1.3	2.6	4.6	5.3	4.8	5.9	7.1	7.2	7.3	7.7	7.6	4.8	3.8	4.0	3.2	2.3	2.2	2.3	7.7	3.8	
27-May	2.7	1.1	0.2	0.3	0.1	0.6	0.4	3.1	6.1	5.8	5.8	5.9	6.2	7.3	7.5	7.7	6.7	5.7	5.0	4.6	4.3	4.6	4.9	4.2	7.7	4.2	
28-May	5.3	4.1	4.6	3.4	4.3	3.5	3.9	7.2	9.5	10.4	11.7	10.8	10.0	10.7	8.7	7.9	7.3	5.8	3.1	3.4	3.6	2.9	2.1	0.2	11.7	6.0	
29-May	0.7	1.0	2.3	1.8	2.3	2.6	1.2	1.3	2.8	2.6	3.2	2.9	2.8	2.5	3.8	2.9	3.4	3.3	0.8	0.4	0.4	0.2	1.2	1.3	3.8	2.0	
30-May	0.3	0.7	0.1	0.3	0.2	0.1	5.6	3.7	2.9	2.6	2.5	3.5	2.6	2.9	2.8	3.5	4.4	3.4	2.0	1.3	1.4	1.5	2.6	1.7	5.6	2.2	
31-May	0.2	0.0	0.8	1.4	4.0	4.1	1.1	4.6	4.2	4.1	2.5	2.5	2.8	2.7	2.2	9.6	9.9	10.1	8.6	7.1	7.0	8.3	7.4	6.8	10.1	4.7	
																								Maximum Hour//Monthly Average		13.8	3.5
																								Total Hours in Month		744	
																								Valid Hours//Percent Data Captured		744	100.0%

Meteorological Report

The Doe Run Company

Wind Direction

Site Name: Rivermines

Average Interval: 01 Hour

Units: Degrees

Sampling Frequency: 01 Second

2012	Hour																								24 Hour Avg
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-May	355	149	157	126	166	179	193	202	197	208	214	218	215	215	213	209	205	196	186	175	185	200	205	202	199
2-May	203	209	210	208	205	206	207	213	219	212	216	203	203	194	180	181	182	187	181	179	175	181	198	193	198
3-May	191	186	195	198	202	205	185	205	197	208	170	171	165	175	179	177	190	196	201	201	189	198	207	200	191
4-May	188	182	109	189	165	191	224	218	233	355	92	136	175	189	205	203	199	189	156	162	188	176	237	198	190
5-May	191	200	84	193	212	239	252	255	277	315	178	178	170	186	195	203	192	171	155	153	163	173	207	75	192
6-May	179	179	163	137	183	174	201	210	217	202	213	205	214	207	205	202	197	195	181	202	188	180	158	175	190
7-May	193	267	287	75	217	304	241	199	180	190	275	311	307	326	329	321	339	332	328	329	321	318	333	293	276
8-May	324	345	294	242	250	306	322	332	334	336	339	331	332	307	265	240	216	211	212	188	189	176	207	213	271
9-May	225	231	228	224	226	216	251	315	332	320	318	328	316	333	335	329	336	328	324	181	168	183	170	219	268
10-May	223	213	226	224	226	214	236	271	10	359	16	19	212	341	51	20	99	199	96	124	224	229	212	19	169
11-May	199	196	173	108	164	186	349	160	161	175	155	179	163	167	173	162	155	131	125	130	223	228	20	287	174
12-May	186	189	195	164	179	149	231	322	65	160	33	52	38	23	31	41	35	27	37	136	182	173	166	209	126
13-May	198	184	188	168	163	201	247	341	1	10	10	13	10	0	2	357	347	351	342	331	330	269	186	177	184
14-May	182	206	181	171	177	195	242	336	357	358	1	5	2	8	12	7	342	342	321	185	178	201	204	203	184
15-May	215	225	216	214	216	215	240	252	256	273	288	316	290	323	291	290	311	292	232	181	181	189	197	212	246
16-May	195	198	209	191	249	225	238	284	262	298	331	342	0	11	355	353	357	354	358	18	182	176	176	181	231
17-May	173	163	183	194	173	198	235	9	35	16	22	50	89	55	39	52	79	79	82	192	181	174	167	167	117
18-May	191	202	177	183	157	215	289	11	144	168	168	160	149	173	182	180	185	192	171	186	206	191	212	173	178
19-May	200	182	168	174	169	191	216	227	174	194	197	192	200	183	198	179	198	180	172	161	163	168	169	202	186
20-May	177	193	159	356	335	349	191	190	218	226	234	227	230	237	273	261	252	217	209	208	165	165	166	330	232
21-May	223	252	313	326	340	342	339	337	330	341	338	341	324	341	333	335	338	342	353	339	153	115	190	179	298
22-May	186	212	211	213	222	224	237	250	16	359	10	352	29	7	333	56	327	324	35	190	174	183	174	167	187
23-May	168	197	197	169	202	175	288	185	189	195	197	190	169	186	171	192	195	186	173	159	149	179	178	176	186
24-May	167	170	169	167	170	166	169	179	174	178	188	183	188	181	182	192	194	198	198	201	197	198	185	194	183
25-May	183	188	172	196	213	349	175	186	206	198	174	115	132	184	177	179	195	187	164	153	150	153	158	149	181
26-May	5	192	174	168	170	205	146	196	211	196	200	182	200	189	189	206	197	194	176	179	189	173	177	178	179
27-May	152	133	186	97	338	326	357	222	229	235	218	220	207	188	187	195	187	199	176	178	174	173	180	190	206
28-May	199	188	201	192	189	194	212	213	218	212	215	210	216	206	211	212	211	208	186	181	183	184	191	177	200
29-May	249	207	203	296	307	333	332	312	22	89	98	168	114	41	339	323	319	323	311	193	193	187	198	201	223
30-May	192	186	177	175	191	213	331	333	133	170	343	4	358	350	346	343	343	21	29	67	23	146	150	130	198
31-May	158	55	148	142	148	153	229	196	155	196	248	251	268	296	281	332	343	332	332	334	330	336	332	323	247
																								Total Hours In Month Valid Hours Percent Data Captured	744 744 100.0%

Meteorological Report

The Doe Run Company

ΣΘ

Site Name: Rivermines

Average Interval: 01 Hour

Units: Degrees

2012	Hour																								24 Hour Avg
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-May	9.5	17.9	35.2	50.2	24.8	22.6	18.7	20.4	19.8	21.5	24.9	23.0	23.0	23.7	24.2	22.3	20.8	20.3	17.8	18.8	20.7	22.0	19.1	20.4	23
2-May	21.1	20.4	21.2	20.9	19.0	18.6	20.5	21.4	22.8	21.9	23.4	21.5	24.9	25.0	26.1	23.7	23.5	21.7	19.8	19.0	19.3	22.7	21.7	20.7	22
3-May	17.8	18.6	22.3	20.2	19.8	20.4	21.9	24.1	24.7	24.9	35.0	38.1	32.5	25.8	26.4	23.5	22.3	22.0	21.5	18.6	21.0	27.7	21.2	16.6	24
4-May	14.6	21.2	27.1	15.7	21.4	19.3	21.7	21.6	39.3	24.2	37.4	35.2	24.1	24.6	21.5	20.9	21.7	19.0	17.6	12.7	7.5	11.2	1.0	6.5	20
5-May	4.2	8.0	16.3	12.4	26.1	13.6	18.9	18.8	35.3	47.9	44.5	46.0	29.5	30.2	26.3	21.7	19.6	18.2	11.1	17.0	17.1	17.4	16.1	2.5	22
6-May	12.3	5.7	15.3	10.6	20.4	17.3	11.8	20.6	23.2	21.5	24.1	25.5	25.1	26.9	26.4	22.2	20.6	18.6	17.9	11.2	14.9	0.3	11.4	20.8	18
7-May	20.1	27.8	31.5	33.8	26.9	27.7	21.0	20.3	25.8	21.7	34.0	30.2	31.8	25.6	29.6	28.5	21.4	20.6	19.3	19.6	20.4	22.9	17.3	16.7	25
8-May	20.7	15.2	24.9	20.0	21.6	26.7	22.1	25.0	25.8	27.7	27.2	30.8	28.8	32.0	36.7	23.6	18.2	9.8	11.0	3.6	4.2	5.0	13.1	14.0	20
9-May	20.8	13.9	18.9	21.4	21.8	19.3	18.8	35.4	30.8	32.1	32.6	34.3	31.0	29.6	23.9	29.4	21.5	20.5	17.4	1.5	4.3	6.1	4.6	15.5	21
10-May	12.5	8.6	14.9	17.8	23.0	28.9	21.1	39.4	62.6	47.8	37.4	51.1	52.0	55.3	54.9	35.3	57.8	16.4	19.7	8.0	1.0	2.0	3.2	4.2	28
11-May	19.3	4.9	7.1	13.6	6.2	2.1	5.4	25.4	28.3	30.6	33.4	31.7	41.1	44.9	45.1	41.3	29.0	26.7	20.7	18.8	4.8	0.2	0.6	0.2	20
12-May	8.1	2.7	2.7	1.2	5.9	7.0	17.8	10.0	27.3	22.9	22.5	37.0	29.1	27.4	30.9	32.8	33.6	27.0	20.7	1.8	2.3	1.4	2.6	7.6	16
13-May	8.3	5.8	3.5	3.8	5.2	0.3	15.2	29.2	30.7	28.9	23.8	28.8	32.4	27.6	29.1	24.2	20.6	19.0	17.2	15.8	16.4	13.0	5.8	4.7	17
14-May	3.7	7.5	11.9	4.5	8.5	4.0	11.7	25.9	21.5	22.0	26.2	30.3	31.1	35.4	37.6	29.2	28.3	22.0	17.9	5.3	2.3	5.6	10.8	13.6	17
15-May	17.5	20.5	18.4	19.4	18.3	19.9	21.6	23.2	33.1	44.9	50.4	59.5	54.4	39.6	51.5	38.2	45.4	27.3	8.2	4.7	5.7	16.1	17.6	19.6	28
16-May	21.1	17.5	16.2	9.1	18.2	15.2	21.9	27.0	42.5	39.7	31.6	27.0	24.8	28.0	30.1	26.1	20.5	19.0	18.2	22.0	13.4	2.4	4.8	3.1	21
17-May	4.1	5.8	4.3	1.5	3.7	5.6	18.3	30.8	36.7	48.3	41.2	39.4	43.1	45.8	44.8	48.8	40.7	34.2	23.3	7.0	3.2	3.9	4.2	2.2	23
18-May	4.8	4.0	0.7	4.1	0.7	7.0	19.4	30.5	34.3	37.5	60.2	37.2	39.7	41.7	34.5	29.6	26.0	22.1	9.2	5.3	3.6	4.1	1.9	3.8	19
19-May	9.8	8.7	8.0	7.9	1.6	6.1	26.0	14.3	25.9	27.1	24.4	27.5	31.4	31.9	27.7	25.0	23.1	21.7	20.5	14.9	16.5	18.9	18.3	9.1	19
20-May	5.7	32.9	24.9	12.7	7.2	7.3	19.6	26.5	25.9	29.2	30.9	28.9	35.3	31.5	32.7	42.1	37.8	17.7	16.9	25.4	50.5	39.5	46.2	38.2	28
21-May	7.4	19.1	26.7	20.7	18.8	17.7	19.3	24.7	24.7	21.9	27.7	24.9	27.0	27.9	26.8	26.8	22.7	24.1	17.1	7.7	9.8	19.9	5.1	5.1	20
22-May	9.3	13.8	20.9	22.0	21.6	22.7	24.8	31.6	48.2	33.6	41.5	32.9	47.3	48.8	60.3	42.9	25.0	26.3	12.5	4.5	1.4	4.2	14.4	1.6	26
23-May	3.0	1.4	8.5	5.2	11.1	6.5	25.8	25.1	27.4	31.4	24.9	34.8	29.7	35.0	31.6	28.4	25.1	22.5	20.1	15.1	19.3	21.0	20.9	21.4	21
24-May	22.7	21.6	21.3	22.5	22.1	24.4	24.6	24.3	25.9	25.0	23.7	23.9	24.3	23.6	26.0	22.4	23.4	21.7	21.4	20.5	21.1	21.1	19.0	17.7	23
25-May	18.4	17.9	19.0	19.5	18.8	9.4	16.2	18.8	34.4	36.1	37.5	48.8	44.2	31.6	28.4	25.8	22.2	22.6	20.7	13.7	10.8	12.9	17.0	16.8	23
26-May	14.2	4.9	20.1	22.8	41.3	13.4	16.7	29.9	26.0	24.5	27.9	28.0	26.2	26.9	26.8	23.3	21.2	20.1	18.7	19.0	18.4	19.4	17.4	17.4	22
27-May	15.1	9.1	3.8	23.2	6.2	8.9	9.7	24.5	26.0	30.7	26.8	30.0	28.1	26.4	23.8	24.3	24.7	18.7	20.4	18.8	17.7	18.1	18.4	20.1	20
28-May	19.7	22.5	17.5	16.7	16.8	21.1	21.8	22.0	23.3	23.0	22.8	23.2	22.5	22.3	24.0	24.9	25.6	20.9	18.3	16.8	17.6	18.3	22.6	6.4	20
29-May	30.1	20.0	43.0	33.6	29.5	26.9	29.5	50.0	32.9	37.9	38.6	52.6	58.6	61.0	41.5	37.3	37.5	22.5	15.0	2.5	2.0	1.4	11.2	15.0	30
30-May	5.3	11.3	2.6	2.4	7.4	10.1	23.8	45.2	63.4	48.8	32.9	24.1	52.0	44.0	33.7	30.8	26.0	26.7	24.5	20.0	22.1	22.1	17.5	19.0	26
31-May	5.9	2.8	8.6	26.7	23.1	27.1	22.9	25.0	35.7	31.6	37.5	41.4	45.8	42.0	39.1	25.0	19.4	20.4	19.9	21.3	20.8	19.0	20.9	21.6	25
Total Hours in Month																								744	
Valid Hours																								744	
Percent Data Captured																								100.0%	



Meteorological Report

The Doe Run Company

Temperature

Site Name: Rivermines

Average Interval: 01 Hour

Units: Deg. C

Sampling Frequency: 01 Second

2012 Day	Hour																								24 Hour	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Avg
1-May	14	16	16	17	18	18	19	20	22	24	27	28	28	30	30	30	30	29	27	25	25	25	25	25	29.8	23.7
2-May	24	24	23	23	23	22	24	26	27	28	29	30	30	31	31	30	30	29	27	26	25	25	24	23	30.7	26.4
3-May	22	21	20	20	20	21	21	23	25	27	28	28	28	27	27	26	25	25	24	23	22	22	21	21	27.9	23.6
4-May	19	20	19	19	19	20	21	24	26	25	26	27	28	28	28	28	29	28	27	25	24	23	22	21	28.7	24.0
5-May	20	20	20	19	19	19	22	26	29	30	31	31	31	32	32	32	31	30	28	27	25	25	24	23	32.3	26.1
6-May	21	20	20	19	18	18	21	26	28	29	30	31	32	32	32	31	31	30	28	25	24	22	22	23	32.4	25.6
7-May	23	23	19	19	19	19	18	19	19	20	22	22	22	22	23	23	22	20	19	19	19	18	18	17	23.3	20.1
8-May	17	16	15	15	14	15	16	17	19	20	21	21	22	21	21	21	20	20	18	15	15	14	13	12	21.5	17.4
9-May	12	12	11	10	9	9	13	16	17	19	20	20	21	21	21	21	20	19	17	14	12	10	10	9	21.4	15.3
10-May	9	8	8	8	7	8	12	15	18	20	21	21	21	22	22	22	22	21	20	16	13	12	11	11	22.2	15.3
11-May	10	9	8	8	7	8	12	17	20	21	22	23	23	23	23	23	23	22	21	19	16	15	15	14	23.5	16.8
12-May	13	13	12	11	11	12	14	16	19	21	21	21	22	22	23	24	23	23	21	17	14	13	11	11	23.7	17.0
13-May	10	9	9	8	8	8	13	16	19	21	22	24	24	25	25	25	24	23	22	19	16	14	13	12	24.7	17.0
14-May	11	10	10	9	8	9	13	16	19	21	22	23	23	24	24	24	24	24	21	17	15	13	12	11	24.4	16.9
15-May	11	11	11	10	10	10	13	17	22	24	26	26	27	27	27	27	27	26	22	18	15	14	13	13	27.4	18.6
16-May	12	11	11	10	10	11	15	20	24	26	26	26	26	27	27	27	26	25	23	20	16	13	11	10	27.1	18.9
17-May	9	9	8	7	6	7	12	15	18	21	23	24	25	25	26	26	26	25	24	18	15	13	12	11	26.3	16.9
18-May	10	10	9	9	9	10	14	18	23	26	28	29	29	30	31	30	30	29	26	22	19	17	16	15	30.7	20.4
19-May	14	14	14	13	13	13	18	23	26	28	29	30	31	30	31	31	31	29	28	25	24	23	22	19	30.7	23.3
20-May	18	19	18	18	18	18	22	25	28	30	31	32	32	31	28	21	18	18	19	19	19	19	18	18	32.2	22.3
21-May	17	17	17	17	16	15	16	17	18	19	20	21	22	22	22	23	22	21	20	16	14	13	11	11	22.6	17.8
22-May	10	9	9	8	8	8	12	16	19	20	21	22	23	23	24	24	24	23	22	17	14	13	12	11	24.1	16.4
23-May	10	10	9	9	9	9	14	19	23	24	25	26	27	28	28	28	28	27	25	21	21	20	20	19	28.3	20.0
24-May	19	18	19	19	18	18	20	22	24	26	28	30	31	31	31	31	30	29	28	27	27	27	26	26	31.3	25.3
25-May	25	24	23	23	21	21	23	25	27	28	30	30	30	32	32	32	31	30	29	27	25	24	24	23	32.0	26.6
26-May	21	20	20	21	20	20	23	26	29	30	32	32	33	33	34	34	33	32	30	28	26	25	23	23	34.2	27.0
27-May	23	21	19	18	17	17	20	26	29	30	31	32	33	33	33	33	33	32	30	28	27	26	26	26	33.2	26.9
28-May	26	25	25	24	24	24	27	29	30	31	32	32	33	33	34	34	34	32	30	28	27	27	25	23	34.2	28.8
29-May	23	23	23	20	20	20	21	21	22	24	27	29	30	31	31	32	31	30	27	23	20	19	18	18	31.8	24.3
30-May	17	16	16	16	15	16	17	17	15	17	20	22	25	27	28	28	28	27	26	24	22	21	21	20	28.3	20.9
31-May	17	16	16	17	18	19	18	18	18	20	22	24	24	24	22	21	18	17	15	14	14	13	13	12	24.0	18.0
																								Maximum Hour/Monthly Average	34.2	21.2
																								Total Hours in Month	744	
																								Valid Hours	744	
																								Percent Data Captured	100.0%	

Meteorological Report

The Doe Run Company

Site Pressure

Site Name: Rivermines

Average Interval: 01 Hour

Units: mmHg

Sampling Frequency: 01 Second

2012 Day	Hour																								24 Hour		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Avg	
1-May	744	743	743	743	742	742	742	742	742	742	742	742	741	741	741	740	740	740	740	740	741	741	741	741	744	742	
2-May	741	741	741	741	741	742	743	743	743	743	743	743	743	743	742	742	742	742	742	742	742	742	743	743	743	742	742
3-May	743	743	743	743	744	744	744	744	744	745	744	744	744	744	743	743	743	742	742	743	743	743	743	743	745	743	
4-May	743	742	743	743	743	743	744	743	743	744	744	743	742	742	741	741	741	741	741	741	742	742	741	742	744	742	
5-May	741	741	742	742	743	743	742	742	742	742	742	742	741	741	741	741	741	741	741	741	741	742	742	742	743	742	
6-May	742	742	742	742	742	742	743	742	742	742	742	742	741	741	741	741	740	740	740	740	740	741	741	741	743	741	
7-May	740	741	742	741	741	741	741	741	742	742	742	742	742	742	741	741	741	741	741	742	742	743	743	743	743	742	
8-May	743	743	743	743	743	744	744	744	744	744	744	744	744	744	744	743	743	743	743	743	743	744	744	744	744	744	
9-May	744	744	744	744	744	744	745	744	745	745	745	744	744	744	743	743	743	743	743	743	744	744	744	744	745	744	
10-May	744	744	743	744	744	744	745	745	745	745	745	744	744	744	743	743	743	743	743	743	744	744	745	745	745	744	
11-May	745	745	746	746	746	747	747	747	747	747	747	747	747	747	747	747	747	747	747	747	748	748	748	748	748	747	
12-May	748	748	748	748	749	749	749	749	749	749	749	749	749	748	748	748	748	748	747	748	748	748	748	748	749	748	
13-May	748	748	748	748	748	748	749	748	748	748	747	747	747	747	746	746	746	746	746	747	747	747	747	747	749	747	
14-May	746	746	747	746	747	747	747	747	747	747	747	747	746	746	745	745	745	745	745	745	746	746	746	746	747	746	
15-May	746	745	745	746	746	746	746	746	746	746	746	745	745	745	744	744	744	744	744	744	744	744	745	745	746	745	
16-May	744	744	744	745	745	745	745	745	745	745	745	744	744	744	744	744	744	744	744	745	745	745	745	745	745	745	
17-May	745	746	746	746	746	747	747	747	746	746	746	746	745	745	745	744	744	744	744	744	744	744	745	744	747	745	
18-May	744	745	745	745	745	745	745	745	745	745	744	744	743	743	743	743	743	742	742	743	743	743	744	743	745	744	
19-May	744	744	744	744	744	745	745	745	745	745	745	745	745	744	744	744	744	744	743	744	744	745	745	746	746	745	
20-May	746	745	746	746	746	746	746	747	747	746	746	746	746	745	745	746	746	745	745	745	747	747	747	747	747	746	
21-May	747	746	747	747	747	748	748	748	748	748	748	748	747	747	747	746	746	746	746	746	746	747	747	747	748	747	
22-May	747	747	746	746	747	747	747	746	746	746	746	745	745	744	743	743	743	742	742	742	742	742	743	742	747	745	
23-May	742	742	742	742	742	742	742	741	741	741	741	740	740	739	739	739	738	738	738	738	738	738	738	738	742	740	
24-May	738	738	738	737	737	738	738	738	738	737	737	737	736	736	736	735	736	736	736	736	737	738	739	739	740	737	
25-May	740	740	740	741	741	742	742	743	743	743	743	744	744	743	743	742	742	743	743	743	744	744	744	744	744	743	
26-May	745	745	745	745	745	746	746	746	746	746	746	746	745	745	744	744	743	743	744	744	744	744	745	745	746	745	
27-May	744	744	744	744	745	745	745	745	745	745	744	744	744	743	742	742	742	742	742	742	742	742	742	742	745	743	
28-May	741	741	741	742	742	742	743	743	742	742	741	741	741	740	740	740	740	739	739	740	740	740	739	740	743	741	
29-May	740	740	741	741	742	742	742	742	742	742	742	742	741	741	741	741	741	741	741	741	741	742	742	742	742	741	
30-May	742	742	742	742	742	743	745	745	744	744	744	744	743	742	742	742	741	741	741	740	740	741	741	741	745	742	
31-May	741	740	740	740	739	739	740	740	738	738	739	738	738	738	738	738	738	739	740	740	741	741	741	741	741	739	
	Maximum Hour/Monthly Average																								749	743	
	Total Hours in Month																								744		
	Valid Hours/Percent Data Captured																								744	100.0%	

Meteorological Report

The Doe Run Company

Precipitation

Site Name: Rivermines

Average Interval: 01 Hour
Sampling Frequency: 01 Second

2012 Day	Hour																								24 Hour		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Total	
1-May	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	
2-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7-May	0.00	0.00	0.22	0.10	0.08	0.17	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.67	
8-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.07	0.02	0.01	0.00	0.00	0.28	0.16	0.00	0.42	0.96	
21-May	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	
22-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29-May	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	
30-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04	
31-May	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.09	
Maximum Hour//Monthly Total																								0.42	1.82		
Total Hours in Month																								744			
Valid Hours//Percent Data Captured																								744	100.0%		

